Abstract

The present invention relates to an interferometric measuring system for measuring, for example, shape deviation, position, surface properties, vibrations, of an object, the measuring system including a transmitting element having a modulation interferometer (12) and a radiation source (11) for short-coherent radiation, as well as a measuring probe system (30) connected thereto for supplying the radiation via a common optical path (41), and further including a receiving element (15) for analyzing the measuring radiation returning from the measuring probe system, said receiving element (15) being combined with the transmitting element in a transmitter/receiver unit (10). A reduction in complexity and cost combined with enhanced application possibilities is achieved in that the measuring probe system (30) includes a plurality of measuring probes (32.1, 32.4) coupled to the common optical path (41) via respective optical paths (42), and in that a switching device (20) is disposed at a coupling point between the common optical path (41) and the respective optical paths (24) to the measuring probes (32.1, 32.4), said switching device allowing the different measuring probes (32.1, 32.4) to be individually brought into a bidirectionally transmitting connection with the transmitter/receiver unit (10) for the radiation supplied by the modulation interferometer (12), on the one hand, and the measuring radiation, on the other hand.

(Figure 1)